

Filing No.: 02824113.4

Our Ref.: IP04-0698-CH15

## PATENT OFFICE OF THE PEOPLE'S REPUBLIC OF CHINA

Applicant:	LG CHEM, LTD.	Date of Issuing:
Agent:	Ting NAN	<u>May 11, 2007</u>
Application No:	02824113.4	
Title of Invention:	MAGNETIC MONO-COMPONENT TONER COMPOSITION	

NOTIFICATION OF THE SECOND OFFICE ACTION

1. ☒ The statement to the FIRST OFFICE ACTION filed by the applicant on April 4, 2007 has been accepted by the examiner. And the substantive examination was proceeded based on the above statement.
- ☐ In accordance with the reexamination decision of the Patent Reexamination Board on \_\_\_\_\_, the examiner proceed with the substantive examination of the above-identified patent application for invention.
2. ☐ The amended documents submitted by the applicant on \_\_\_\_\_ may not be accepted because the amendment(s) is (are) not in conformity with the provision of Paragraph 3 of Rule 51 of the Implementing Regulations of the Patent Law of China
3. The continue examination is conducted on the basis of the following application documents:
- ☐ The amended application documents appended to the above statement.
  - ☒ The application documents to which the previous Office Action aimed and the substitute pages of the amended application documents appended to the above statement.
  - ☐ The application documents aimed by the previous Office Action.
  - ☐ The application documents defined by the above reexamination decision.
4. ☐ No new reference document is cited in the notification
- ☒ The following references are cited in the notification (the serial numbers thereof will continue to be used in the examination hereafter):

Serial No.	Reference No. or Title	Publication Date (or Filing Date of Conflict Application)
1.	EP0971273A1	January 12, 2000
2.	CN1150262A	May 21, 1997
3.	JP2001034007A	February 9, 2001

## 5. Conclusive opinion:

☐ regarding the Description

- ☐ the content of the application falls in the unallowable scope as provided by Article 5 of the Patent Law of China.

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- ☐ the Description is not in conformity with the provisions of Paragraph 3 of Article 26 of the Patent Law of China.
- ☐ the amendment of the Description is not in conformity with the provisions of Article 33 of the Patent Law of China.
- ☐ the Description is not in conformity with Rule 18 of the Implementing Regulations of the Patent Law of China.
- ☐

☒ regarding the Claims

- ☐ Claims\_\_\_\_\_do not possess the novelty as provided by Paragraph 2 of Article 22 of the Patent Law of China.
- ☒ Claims 1-7 do not possess the inventiveness as provided by Paragraph 3 of Article 22 of the Patent Law of China.
- ☐ Claims\_\_\_\_\_do not possess the practical applicability as provided by Paragraph 4 of Article 22 of the Patent Law of China.
- ☐ Claims\_\_\_\_\_fall in the unallowable scope of Article 25 of the Patent Law.
- ☐ Claims\_\_\_\_\_do not meet the requirement of Paragraph 4 of Article 26 of the Patent Law of China.
- ☐ Claims\_\_\_\_\_do not meet the requirement of Paragraph 1 of Article 31 of the Patent Law of China.
- ☐ the amendment of Claims\_\_\_\_\_do not meet the requirement of Article 33 of the Patent Law of China.
- ☐ Claims\_\_\_\_\_do not meet the definition of invention in the Paragraph 1 of Rule 2 of the Implementing Regulations of the Patent Law of China.
- ☐ Claims\_\_\_\_\_do not meet the requirement of Paragraph 1 of Rule 13 of the Implementing Regulations of the Patent Law of China.
- ☐ Claims\_\_\_\_\_do not meet the requirements of Rule 20 of the Implementing Regulations of the Patent Law of China.
- ☐ Claims\_\_\_\_\_do not meet the requirements of Rule 21 of the Implementing Regulations of the Patent Law of China.
- ☐ Claims\_\_\_\_\_do not meet the requirements of Rule 22 of the Implementing Regulations of the Patent Law of China.
- ☐ Claims\_\_\_\_\_do not meet the requirements of Rule 23 of the Implementing Regulations of the Patent Law of China.

☐

Please refer to the text of the notification for the detailed opinions for the above.

6. Based on the above conclusive opinion, the examiner holds that

- ☐ applicant should amend the application documents according to the requirements of the text of the notification.
- ☐ applicant should state the reason that the application may be allowed for patent in his observation and amend the application documents according to what is pointed out in the text of the notification, otherwise, no patent may be granted for the application.

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☒ there is no substantive content allowable for patent in the present application. If the applicant does not submit his observation or his observation is not sufficiently convincing, the application will be rejected.

☐

7. Following items shall come to applicant's attention:

- (1) According to Article 37 of the Patent Law of China, the applicant shall submit his observation within 2 months from the date he receives the notification. If, without any justified reason, the time limit for making a response is not met, the application will be deemed to be withdrawn.
- (2) The amendments to the application documents should meet the requirement of Article 33 of the Patent Law of China. The amendment text shall be in duplicate and the formalities thereof shall comply with the relevant provisions of the Examination Guide.
- (3) The observation and / or amendment documents should be mailed to or delivered directly to the Receiving Section of the Patent Office of China, otherwise, those which are not mailed or delivered are of no legal effect.
- (4) The applicant and / or his agent may not interview with the examiner if an appointment has not been made.

8. The text of this notification consists of 4 pages, including the following annexes:

☒ 30 pages of 3 copies of the cited references.

☐

Department of Examination

Photoelectricity Examination Department

Examiner: Lini TANG (signature)

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## Text of the Notification of the Second Office Action

Application No.: 02824113.4

The examiner studied the statement filed by the applicant on April 4, 2007, and examined the amended application documents appended to the above statement. The examiner thinks that some contents not in conformity to the requirements of the Patent Law still exist in the present application document, therefore further presents the examination opinions as follows.

1, Claim 1 does not possess the inventiveness as provided by Paragraph 3 of Article 22 of the Patent Law of China. Reference 1 (EP-0971273A1) disclosed the following technical features (line 35 of page 9 to line 33 of page 10, lines 2-26 of page 5, lines 38-39 of page 6 of the Description): The toner comprises toner particles and an external additive; said external additive has small-particle-diameter hydrophobic silica (A) (the specific surface area is  $150\text{mg/m}^2$  to  $300\text{mg/m}^2$ ), large-particle-diameter hydrophobic silica (B) (the specific surface area is  $20\text{mg/m}^2$  to  $60\text{mg/m}^2$ ) and fine alumina particles; wherein, the silica (A) are added to the toner in an amount of 0.5 part by weight to 2.0 parts by weight based on 100 parts by weight of the toner particles, the silica (B) are added to the toner in an amount of 0.1 part by weight to 1.0 part by weight based on 100 parts by weight of the toner particles, and the fine alumina particles are added to the toner in an amount of 0.03 part by weight to 1.5 parts by weight based on 100 parts by weight of the toner particles. The above ranges of additives overlap or fall within the corresponding ranges of claim 1, i.e. reference 1 disclosed the technical features of b), c) and d) of claim 1. In addition, reference 1 also disclosed that the toner particles comprise a adhesive resin, a charge control agent and colorant, such as magnetic material, etc., wherein, the magnetic material is added in an amount of about 40 to 150 parts by weight based on 100 parts by weight of the adhesive resin, the charge control agent is added in an amount of 0.5 to 10 parts by weight based on 100 parts by weight of the adhesive resin. Although the meteyard (adhesive resin) of contents of the three components is different from the meteyard (toner particles) of claim 1, according to the conversion of the end point

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value disclosed by reference 1, it can be known that the percent contents of the adhesive resin, magnetic material and charge control agent in the toner particles overlap the ranges claimed by claim 1, i.e., reference 1 also disclosed the technical feature a) of claim 1.

Thus it can be seen, the difference between claim 1 and reference 1 just is: the metal oxide fine power of claim 1 is selected from a group consisting of titanium dioxide, zinc oxide, magnesium oxide, cerium oxide, iron oxide, copper oxide and tin oxide, and the function is to prevent the toner from adsorbing on the photoconductive drum surface when many images are printed for a long time, while the fine alumina particles is used in reference 1. Reference 3 (JP2001034007A) disclosed a metal oxide particle used for the external additive of toner (see paragraphs 12-14 of the description), such as titanium oxide, aluminum oxide, zinc oxide, magnesium oxide, tin oxide, cerium oxide, iron oxide, copper oxide particles having a particle diameter of 20-350nm, and the function is also to ensure the flowability, durability and chargeability of the toner. Thus it can be seen, reference 3 has disclosed the distinguishing technical feature between claim 1 and reference 1, and the effect of this technical feature in reference 1 is the same with that in the present invention (see paragraphs 4 and 5 in page 8 in the description of the present application, corresponding to paragraphs 3-4 in page 11 of the English description). Since both reference 1 and reference 3 relate to the metal oxide additive of toner, the person skilled in the art can use the metal oxide additives such as titanium oxide, zinc oxide, magnesium oxide, tin oxide in reference 3 to the magnetic toner in reference 1 easily, in order to ensure the flowability, durability and chargeability of the toner. That is to say, it is obvious to obtain the technical solution of claim 1 for the person skilled in the art by combining reference 3 based on reference 1, and claim 1 does not possess the inventiveness as provided by Paragraph 3 of Article 22 of the Patent Law of China.

Also, the applicant should note, even the applicant write the recordation of metal oxide particle in the description into the technical solution of claim 1, claim 1 still does not possess the inventiveness. Please see the above comments for the reasons.

In addition, the applicant stated that "Example 1 of reference 1 discloses a toner

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comprising 0.4 part of large-particle-diameter hydrophobic fine silica particles, which corresponds to Comp. Example 3 of the present application", but this statement does not accord with the fact. Example 1 of reference 1 discloses a toner comprising 0.4 part of large-particle-diameter ( $31\text{mg/m}^2$ ) hydrophobic fine silica particles (see paragraph 128 in the description), but 0.4wt% small-particle-diameter (specific surface area of  $180\text{mg/m}^2$ ) silica particles are used in Comp. Example 3 of the present application. Moreover, according to the recollection of the original application document (the last paragraph of page 8 in the description of the present application, corresponding to the last paragraph in page 11 of the English description) and the prior technique known by the person skilled in the art (for example, JP2001034007A, paragraphs 13 and 14 in the description; JP2001034006A, paragraphs 3, 4, 9 and 10 in the description), the metal oxide of titanium oxide, aluminum oxide, zinc oxide, magnesium oxide, tin oxide etc. is only the equivalent substitute of aluminum oxide as an external additive in the toner. Therefore, deleting aluminum oxide can not make the present applicant have the inventiveness. In addition, the Comp. Example 1 submitted in the statement brings new technical contents to the present application. Therefore, the applicant want to prove the inventiveness of claim 1 based on the Comp. Example 1, this can not be accepted by the examiner.

2. The dependent claim 2 further defines the claim 1 by selecting range of the binder resin. Reference 1 also disclosed the types of resin (line 55 of page 9 to line 5 of page 10 of the Description), such as poly(methacrylate), poly(butyl acrylate), poly(butyl methacrylate), polyamide, rubber, etc. Thus it can be seen, the additional technical feature of dependent claim 2 has been disclosed by reference 1, and they are both used for the binder resin of toner. Therefore, since claim 1 does not possess the inventiveness, the dependent claim 2 also does not possess the inventiveness.

3. The dependent claim 3 further defines claim 1 that the magnetic component of is "one or more selected from the group consisting of alloys or mixtures of magnetite, hematite, ferrite, iron, cobalt, nickel, or manganese; ferromagnetic alloys; and a magnetic oxide". Reference 2 (CN1150262A) disclosed the magnetic component of

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magnetic toner composition (paragraph 7 to paragraph 8 of page 13 of the Description), and the magnetic material may comprise: ferric oxide, such as magnetite, hematite and ferrite; magnetic ferric oxide containing another metal oxide; metal, such as Fe, Co and Ni, alloys of these metals with other metals; and the mixtures of the above substance. It can be seen, the additional feature of dependent claim 3 has been disclosed by reference 2, and they both are used for the magnetic component of toner. Thus, the skilled person of the prior art can easily combine reference 2 based on reference 1 to obtain the technical solution of claim 3. Therefore, this claim does not possess prominent substantive features and notable progress, and does not meet the requirement of inventiveness under Paragraph 3 of Article 22 of the China Patent Law.

4. The dependent claim 4 further defines claim 1 that the charge control agent is "a metal complex azo dye or a salicylic acid compound for a negative charged toner, and a nigrosine dye or a quaternary ammonium salt for a positive charged toner". Likewise, reference 1 (see line 26 to line 33 of page 10 of the Description) disclosed that the charge control agent may be selected from negative metal compounds of salicylic acid and positive quaternary ammonium salts, etc. Thus it can be seen, the additional feature of dependent claim 4 has been disclosed by reference 1. Therefore, since claim 1 does not possess the inventiveness, the dependent claim 4 also does not possess the inventiveness.

5. The dependent claim 5 further defines claim 1. Reference 1 (see lines 43-52 of page 11 of the Description) disclosed that a release agent may optionally be added to the toner particles, such as various of waxes, low-molecular weight polyethylene, low-molecular weight polypropylene, etc., and the release agent may be added in an amount of 0.5 to 10 parts by weight based on 100 parts by weight of binder resin; the function of the release agent also is to prevent offset of the toner particles. Thus, the additional feature of dependent claim 5 has been disclosed by reference 1. Therefore, since claim 1 does not possess the inventiveness, the dependent claim 5 also does not possess the inventiveness.

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6. The dependent claim 6 further defines claim 1. Reference 1 (lines 25-29 in page 8 of the description) also discloses the toner particles may preferably have a particle diameter of 4 to 9 $\mu$ m, which overlaps the range of claim 6. Thus, the additional feature of dependent claim 6 has been disclosed by reference 1. Therefore, since claim 1 does not possess the inventiveness, the dependent claim 6 also does not possess the inventiveness.

7. The dependent claim 7 further defines claim 1. Reference 1 (see lines 14 to 46 of page 5 of the Description) discloses the technical feature of treating silica particles with silicone oil, and the effect of this process is also to make the surface of the additive silica hydrophobic. Thus, the additional feature of dependent claim 7 has been disclosed by reference 1. Therefore, since claim 1 does not possess the inventiveness, the dependent claim 7 also does not possess the inventiveness.

Based on the above reasons, all the claims of this application do not possess the inventiveness, and no any substantive contents to be granted are recorded in the description of the present application. Therefore, even though the application documents are amended, the present application does not possess the prospect of being granted. The applicant should submit the reply before the time limit specified in this notification. If the applicant can not present convictive reasons for the inventiveness of the present application, the present application will be rejected.

The amendment to the application documents should conform to Article 33 of the China Patent Law, may not exceed the scope of original Description and Claims. The amendment documents submitted by the applicant should include: one copy of the original sheets involving the amendments on which the addition, deletion and replacement are marked with visible marks, and the replacement sheets in duplicate. The applicant should ensure the consistency of the two copies in content.



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## RELEVANT PROVISIONS

### PATENT LAW OF THE PEOPLE'S REPUBLIC OF CHINA

Article 22. Any invention or utility model for which patent right may be granted must possess novelty, inventiveness and practical applicability.

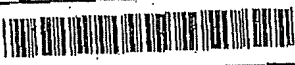
Novelty means that, before the date of filing, no identical invention or utility model has been publicly disclosed in publications in the country or abroad or has been publicly used or made known to the public by any other means in the country, nor has any other person filed previously with the Patent Administration Department Under the State Council an application which described the identical invention or utility model and was published after the said date of filing.

Inventiveness means that, as compared with the technology existing before the date of filing, the invention has prominent substantive features and represents a notable progress and that the utility model has substantive features and represents progress.

Practical applicability means that the invention or utility model can be made or used and can produce effective results.

Article 37. Where the Patent Administration Department Under the State Council, after it has made the examination as to substance of the application for a patent for invention, finds that the application is not in conformity with the provisions of this Law, it shall notify the applicant and request him or it to submit, within a specified time limit, his or its observations or to amend the application. If, without any justified reason, the time limit for making response is not met, the application shall be deemed to have been withdrawn.

# 中华人民共和国国家知识产权局

100097 北京市海淀区紫竹院路 116 号嘉豪国际中心 B 座 11 层 北京金信立方知识产权代理有限公司 南露	发文日
申请号: 028241134	
申请人: LG 化学株式会社	
发明名称: 磁性单组分调色剂组合物	



## 第 2 次审查意见通知书

1. ☒ 审查员已收到申请人于 2007 年 4 月 4 日提交的意见陈述书, 在此基础上审查员对上述专利申请继续进行实质审查。

☐ 根据国家知识产权局专利复审委员会于 年 月 日作出的复审决定, 审查员对上述专利申请继续实质审查。

☐ 申请人于 年 月 日提交的修改文件, 不符合专利法实施细则第 51 条第 3 款的规定。

3. 继续审查是针对下述申请文件进行的:

- ☐ 上述意见陈述书中所附的经修改的申请文件。  
☒ 前次审查意见通知书所针对的申请文件以及上述意见陈述书中所附的经修改的申请文件替换页。  
☐ 前次审查意见通知书所针对的申请文件。  
☐ 上述复审决定所确定的申请文件。

4. ☐ 本通知书未引用新的对比文件。

☒ 本通知书引用下述对比文件(其编号续前, 并在今后的审查过程中继续沿用):

编号	文件号或名称	公开日期(或抵触申请的申请日)
1	EP0971273A1	2000. 1. 12
2	CN1150262A	1997. 5. 21
3	JP2001034007A	2001. 02. 09

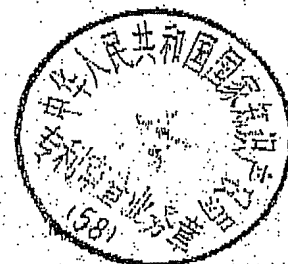
5. 审查的结论性意见:

☐ 关于说明书:

- ☐ 申请的内容属于专利法第 5 条规定的不授予专利权的范围。  
☐ 说明书不符合专利法第 26 条第 3 款的规定。  
☐ 说明书的修改不符合专利法第 33 条的规定。  
☐ 说明书的撰写不符合专利法实施细则第 18 条的规定。

☒ 关于权利要求书:

- ☐ 权利要求 不具备专利法第 22 条第 2 款规定的新颖性。  
☒ 权利要求 1-7 不具备专利法第 22 条第 3 款规定的创造性。  
☐ 权利要求 不具备专利法第 22 条第 4 款规定的实用性。  
☐ 权利要求 属于专利法第 25 条规定的不授予专利权的范围。  
☐ 权利要求 不符合专利法第 26 条第 4 款的规定。  
☐ 权利要求 不符合专利法第 31 条第 1 款的规定。  
☐ 权利要求 的修改不符合专利法第 33 条的规定。



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- ☐ 权利要求 不符合专利法实施细则第 2 条第 1 款的规定。  
☐ 权利要求 不符合专利法实施细则第 13 条第 1 款的规定。  
☐ 权利要求 不符合专利法实施细则第 20 条的规定。  
☐ 权利要求 不符合专利法实施细则第 21 条的规定。  
☐ 权利要求 不符合专利法实施细则第 22 条的规定。  
☐ 权利要求 不符合专利法实施细则第 23 条的规定。

☐ 分案的申请不符合专利法实施细则第 43 条第 1 款的规定。

上述结论性意见的具体分析见本通知书的正文部分。

6. 基于上述结论性意见, 审查员认为:

- ☐ 申请人应按照通知书正文部分提出的要求, 对申请文件进行修改。  
☐ 申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由, 并对通知书正文部分中指出的不符合规定之处进行修改, 否则将不能授予专利权。  
☒ 专利申请中没有可以被授予专利权的实质性内容, 如果申请人没有陈述理由或者陈述理由不充分, 其申请将被驳回。

7. 申请人应注意下述事项:

- (1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的贰个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。  
(2) 申请人对其申请的修改应符合专利法第 33 条和实施细则第 51 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。  
(3) 申请人的意见陈述书和/或修改文本应邮寄或递交国家知识产权局专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。  
(4) 未经预约, 申请人和/或代理人不得前来国家知识产权局专利局与审查员举行会晤。

8. 本通知书正文部分共有 4 页, 并附有下列附件:

- ☒ 引用的对比文件的复印件共 3 份 30 页。

审查员: 汤丽妮 (5641)

2007 年 4 月 11 日



审查部门 光电技术审查部

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2006.7



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(注: 凡寄给审查员个人的信函不具有法律效力)

中华人民共和国国家知识产权局

**第二次审查意见通知书正文**

申请号: 028241134

审查员研究了申请人于2007年4月4日提交的意见陈述书, 并对所附的经过修改的申请文件进行了审查, 认为目前的申请文件中仍还存在不符合专利法有关规定之处, 因此再次提出如下的审查意见。

1、权利要求1不具备专利法第22条第3款规定的创造性。对比文件1 (EP0971273A1)公开了一种调色剂, 并具体公开了以下技术特征 (说明书第9页第35行至第57行至第10页第33行, 说明书第5页第2行至第26行, 第6页第38行至第39行): 该调色剂由调色剂颗粒和外部添加剂组成, 外部添加剂包括小粒径疏水二氧化硅(A) (比表面积为 $150-300\text{mg/m}^2$ )、大粒径疏水二氧化硅(B) (比表面积为 $20-60\text{mg/m}^2$ ) 和氧化铝金属氧化物细粉, 其中, 二氧化硅(A)相对于每100份调色剂颗粒的添加量为0.5至2.0份, 二氧化硅(B)相对于每100份调色剂颗粒的添加量为0.1至1.0份, 氧化铝细粉相对于每100份调色剂颗粒的添加量为0.03至1.5份, 上述添加剂的范围与权利要求1中的相应范围均部分重叠或落入后者所述范围内, 也即对比文件1公开了权利要求1的技术特征b)、c)、d); 此外, 对比文件1还公开了其中的调色剂颗粒包括粘合树脂, 电荷调节剂和着色剂如磁性材料等, 其中, 磁性材料相对于每100份粘合树脂添加量为40至150份, 电荷调节剂相对于每100份粘合树脂添加量为0.5至10份, 尽管这三种成分含量范围的基准 (粘合树脂) 与权利要求1所述的基准 (调色剂颗粒) 不一样, 但根据对比文件1公开的端点值换算可知调色剂颗粒中粘合树脂、磁性材料和电荷调节剂的百分含量与权利要求1要求保护的范 围是部分重叠的, 也即对比文件1还公开了权利要求1的技术特征a)。

由此可见, 权利要求1与对比文件1的区别仅在于: 权利要求1的金属氧化物细粉选自二氧化钛、氧化锌、氧化镁、氧化铈、氧化铁、氧化铜、氧化锡, 其作用是阻止调色剂在许多图像长时间印刷时吸附在光电导鼓的表面上, 而对比文件1中的采用的是氧化铝金属细粉。对比文件3 (JP2001034007A) 公开了一种用于调色剂外部添加剂的金属氧化物粒子 (具体参见说明书第12-14段), 如粒径为 $20-350\text{nm}$ 的氧化钛、氧化铝、氧化锌、氧化镁、氧化锡、氧化铈、氧化铁、氧化铜颗粒, 并且其作用也是为了保证调色剂的流动性、耐久性和充电性, 由此可见, 对比文件3已经公开了权利要求

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1与对比文件1的区别技术特征,并且该特征在对比文件1中所起的作用与其在本发明中的作用相同(参见本申请说明书第8页第4、5段),由于对比文件1和对比文件3均涉及到调色剂中的金属氧化物添加剂,因此,本领域技术人员容易将对比文件3中的金属氧化物添加剂如氧化钛、氧化锌、氧化镁、氧化锡等用于对比文件1中的磁性调色剂,以保证调色剂的流动性、耐久性和充电性,即在对比文件1的基础上结合对比文件3得到权利要求1的技术方案对本领域技术人员而言是显而易见的,其不具备专利法第22条第3款规定的创造性。

另外,请申请人注意,即使申请人将说明书中对金属氧化物颗粒的记载写入权利要求1的技术方案中,该情况下权利要求1仍不具有创造性,具体参见上文的评述。

此外,申请人辩称“对比文件的实施例1公开了一种包括0.4份大粒径疏水细二氧化硅颗粒的调色剂,其对应于本申请的对比实施例3”,这一说法是不符合事实的。对比文件1的实施例1公开的是一种包括0.4份大粒径( $31\text{mg/m}^2$ )疏水细二氧化硅颗粒的调色剂(参见说明书第128段),但是本申请的对比实施例3中使用的是0.4wt%的小粒径(其比表面积为 $180\text{mg/m}^2$ )二氧化硅颗粒,而且,根据原申请文件的记载(说明书第8页最后一段)以及本领域技术人员所掌握的现有技术(如JP2001034007A,说明书第13、14段;JP2001034006A,说明书第3、4、9、10段),氧化钛、氧化铝、氧化锌、氧化镁、氧化锡等金属氧化物作为调色剂中的外部添加剂只不过是氧化铝的等效替代方式,因此,把氧化铝删除并不能使本申请具有创造性。此外,在补正中后补交的对比例1给申请本身带来了新的技术内容,因此,申请人依据后补交的对比例1证明的权利要求1的创造性不能被审查员接受。

2、从属权利要求2对权利要求1进一步限定出其中粘合剂树脂的选择范围。对比文件1也公开了树脂类型(说明书第9页第55行至第10页第5行),如聚甲基丙烯酸酯、聚丙烯酸丁酯、聚甲基丙烯酸丁酯、聚酰胺、橡胶等,可见,从属权利要求2的附加技术特征已被对比文件1公开,且其都是用于调色剂中的粘合剂树脂,因此,当权利要求1无创造性时,从属权利要求2也不具备创造性。

3、从属权利要求3对权利要求1进一步限定出其中磁性组分“选自磁铁矿、赤铁矿、铁氧体、铁、钴、镍或镁的合金或混合物;铁磁性合金和磁性氧化物组成的一种

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或多种”。对比文件2 (CN1150262A) 公开了磁性调色剂组合物中磁性组分 (说明书第13页第7段至第8段), 磁性材料可包括: 铁氧化物, 如磁铁矿、赤铁矿和铁氧铁; 含另一种金属氧化物的磁性铁氧化物; 金属, 如 Fe、Co 和 Ni, 以及这些金属与其他金属的合金; 以及上述物质的混合物。可见, 从属权利要求3的附加技术特征已被对比文件2公开, 且其都是用于调色剂中的磁性组分, 因此, 本领域技术人员很容易在对比文件1的基础上结合对比文件2, 得出权利要求3的技术方案, 因此, 该权利要求不具备突出的实质性特点和显著的进步, 不符合专利法第22条第3款有关创造性的规定。

4、从属权利要求4对权利要求1进一步限定出其中电荷调节剂“是用带负电荷的调色剂的金属络合物偶氮染料或水杨酸化合物, 和用于带正电荷的调色剂的苯胺黑染料或季铵盐”, 对比文件1同样公开了电荷调节剂 (参见说明书第10页第26行至第33行) 可选自带负电荷的水杨酸金属化合物和带正电荷的季铵盐等, 可见, 从属权利要求4的附加技术特征已被对比文件1公开, 因此, 当权利要求1无创造性时, 从属权利要求4也不具备创造性。

5、从属权利要求5对权利要求1作了进一步限定, 对比文件1公开了 (参见说明书第11页第43行至第52行) 向调色剂颗粒中添加隔离剂如各种蜡, 低分子量的聚乙烯、聚丙烯等, 且相对于每100份粘合剂树脂其添加量为0.5~10份, 其作用也是为了阻止调色剂颗粒的污损, 因此, 从属权利要求5的附加技术特征已被对比文件1公开, 因此, 当权利要求1无创造性时, 从属权利要求5也不具备创造性。

6、从属权利要求6对权利要求1作了进一步限定, 对比文件1 (参见说明书第8页第25行至29行) 中同样公开了其调色剂的粒径为4~9  $\mu\text{m}$ , 与该权利要求范围部分重叠, 因此, 从属权利要求6的附加技术特征已被对比文件1公开, 因此, 当权利要求1无创造性时, 从属权利要求6也不具备创造性。

7、从属权利要求7对权利要求1作了进一步限定, 对比文件1公开了 (参见说明书第5页第14行至46行) 用硅酮油对二氧化硅颗粒进行处理这一技术特征, 其作用也是为了使二氧化硅添加剂的表面具有疏水性, 因此, 从属权利要求7的附加技术特征已被对比文件1公开, 因此, 当权利要求1无创造性时, 从属权利要求7也不具备创造性。

基于上述理由, 该申请的全部权利要求都不具备创造性, 而且本申请的说明书中

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也没有记载其它任何可获得专利权的实质性内容，因而即使对申请文件进行修改，本申请也不具备被授予专利权的前景。申请人应在本通知书指定的答复期限内作出答复。如果申请人不能在意见陈述书中提出有说服力的本申请具有创造性的理由，本申请将被驳回。

申请人对申请文件的修改应当符合专利法第三十三条的规定，不得超出原说明书和权利要求书的记载范围。申请人提交的修改文件应当包括：修改涉及部分的原文复印件，采用明显标记在该复印件上标注出所作的增加、删除或替换；重新打印的替换页（一式两份），用于替换相应的原文。申请人应当确保上述两部分在内容上的一致性。

审查员：汤丽妮

代码：5641